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Recovery experiences of the Russian economy

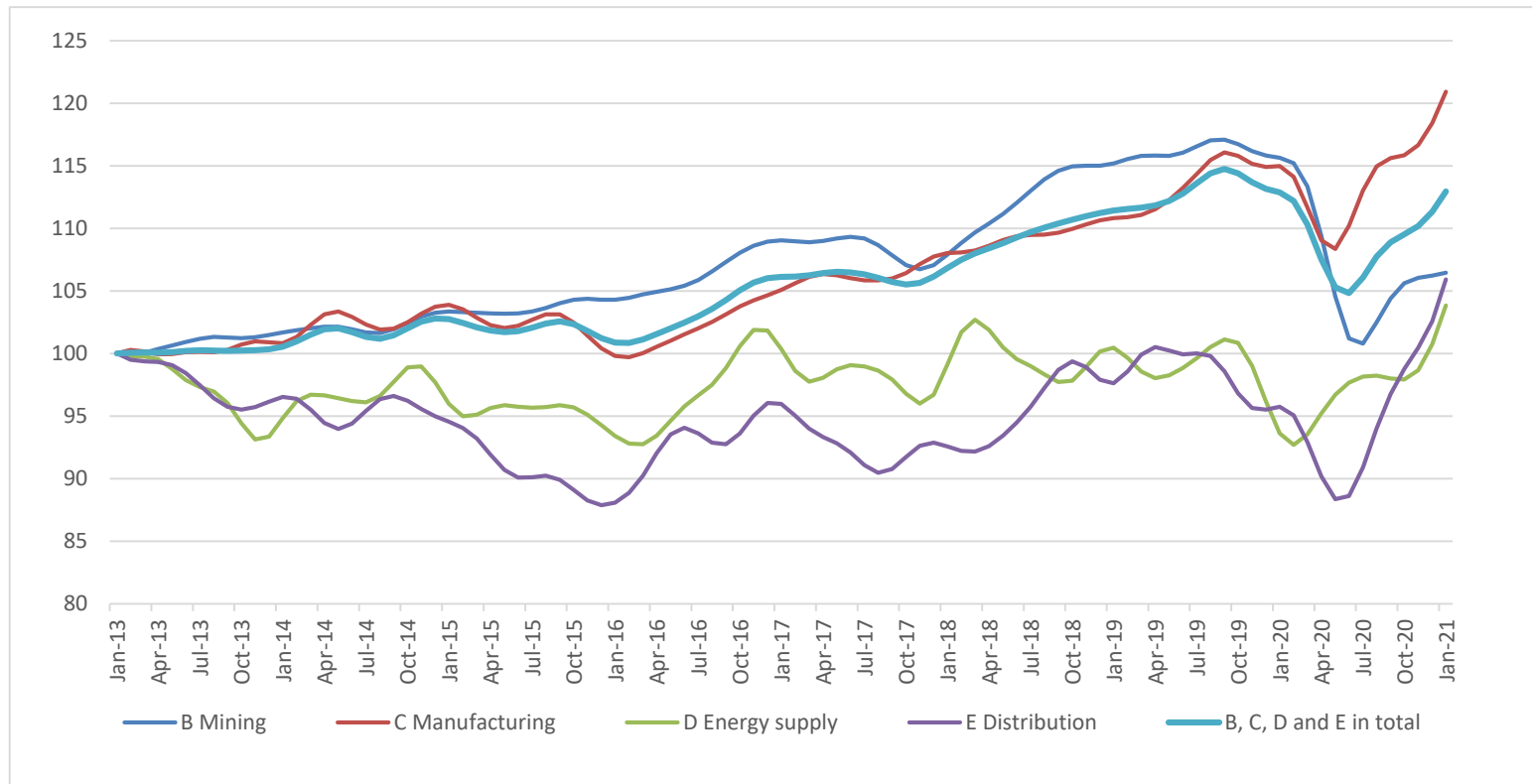
The patterns of the post-shock growth after 1998 and 2008 and future prospection

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The Russian economy is recovering after the shock

Monthly Industrial Production, Jan 2013 – Jan 2021 (Jan 2013 = 100)

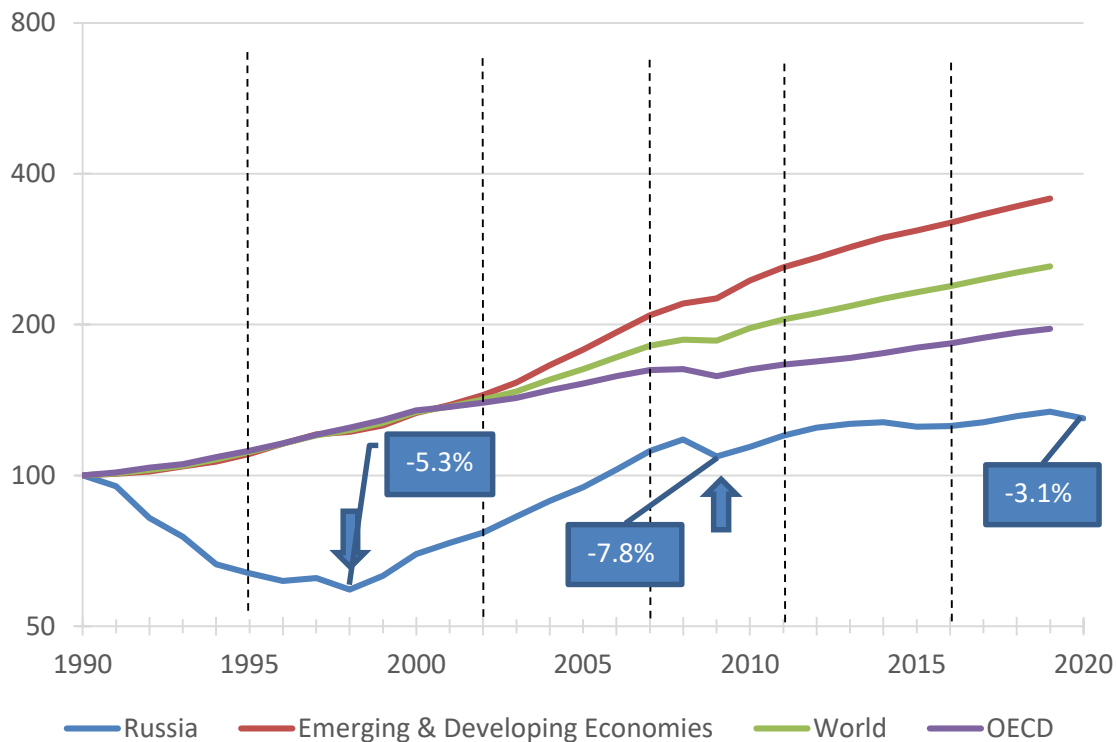


Source: Higher School of Economics; Bessonov, Baranov 2020; Centre of Development Institute



Economic growth of the global economy and Russia in 1990-2020

GDP in comparable prices, 1990 = 100; logarithmic scale



Source: The Conference Board Total Economy Database™ (Adjusted version), April 2019; Rosstat

Comments: Emerging and Developing Economies include China, India, developing economies in Asia, Latin America, Middle East, Africa, Central Asia and South-East Europe.



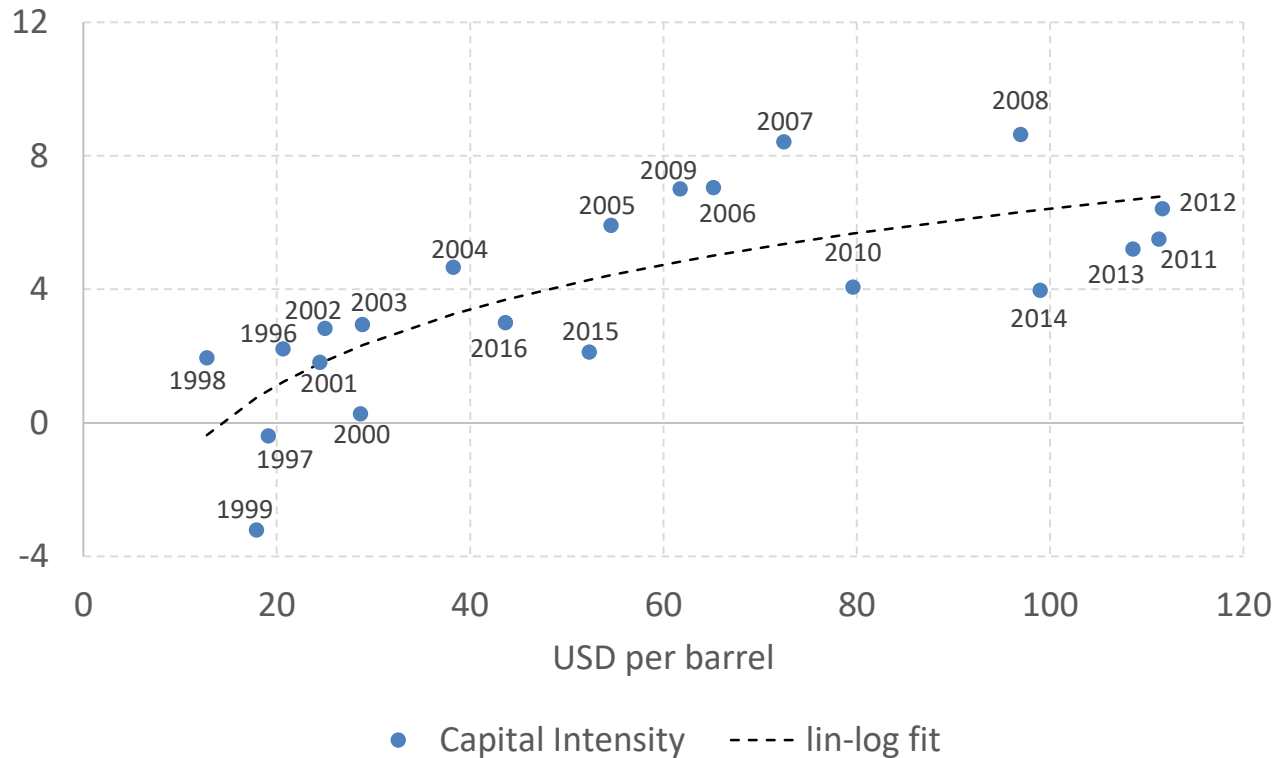
What are perspectives of the post-crisis growth of the Russian economy?

1. **Russia in the long run: extensive versus intensive growth**
2. **Proximate sources of Russian growth: growth accounting**
3. **Sectoral TFP contributions and the negative impact of mining**
4. **Summary: growth prospects for Russia after the COVID shock**



Extensive growth: capital intensity growth & oil prices

Capital intensity growth rates (per cent per year) and the average level of oil prices

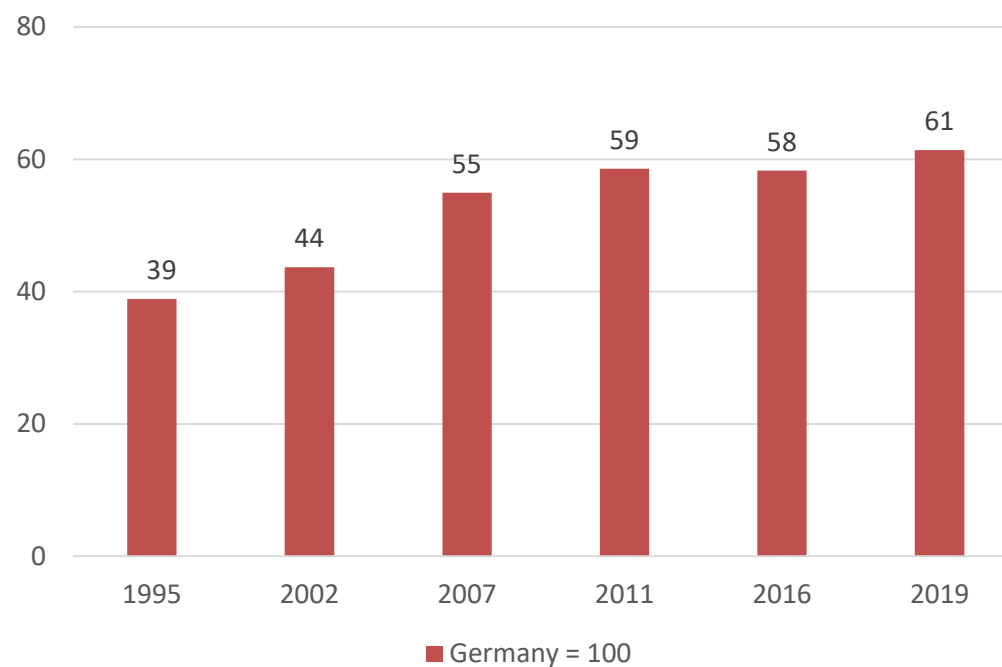


Data: Russia KLEMS; IEA



Technology catch-up stopped in early 2010-s

Labour productivity level of the Russian economy relative to **Germany**

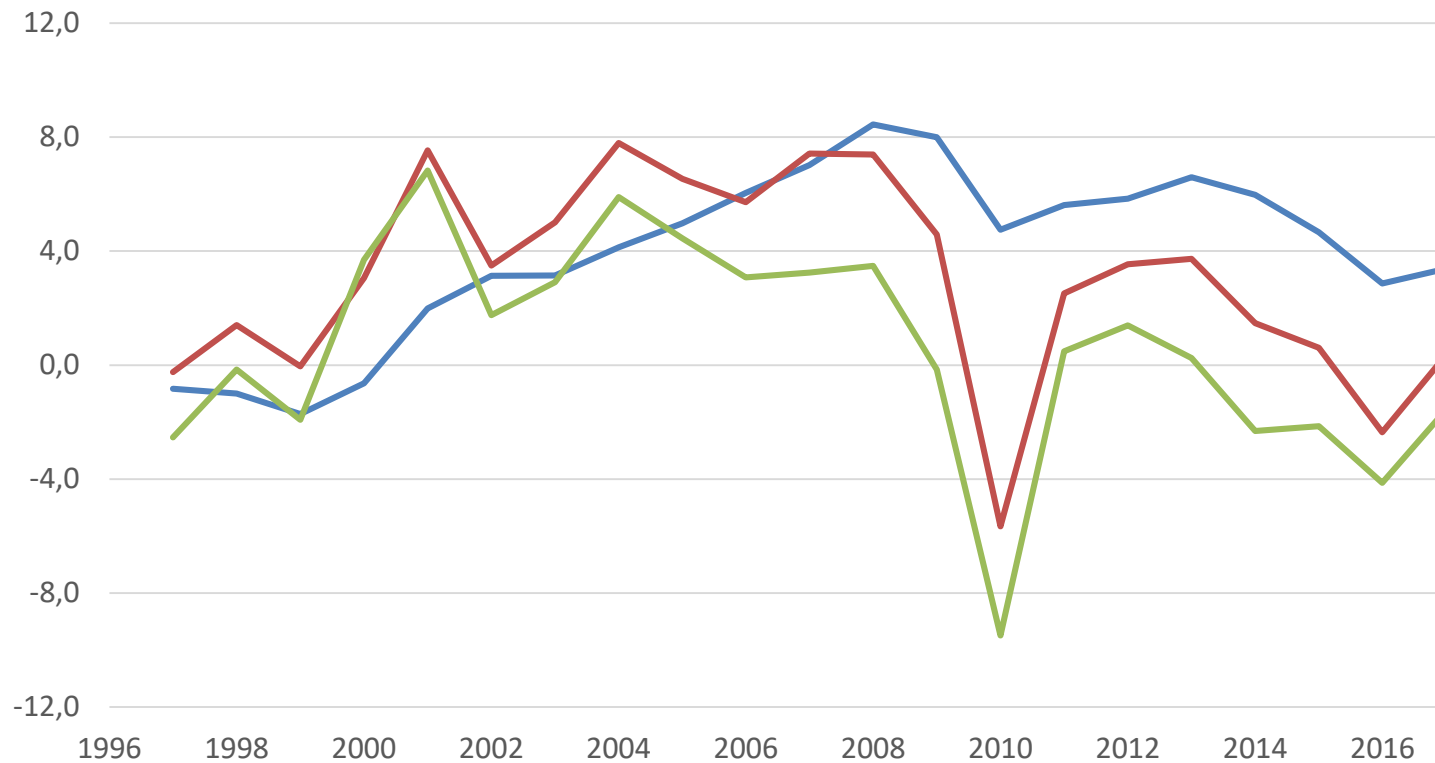


Source: The Conference Board Total Economy Database™ (Adjusted version), April 2019



TFP slowdown started in Russia well before 2008

Labour productivity (red), capital intensity (blue), total factor productivity (green) (percent per year)



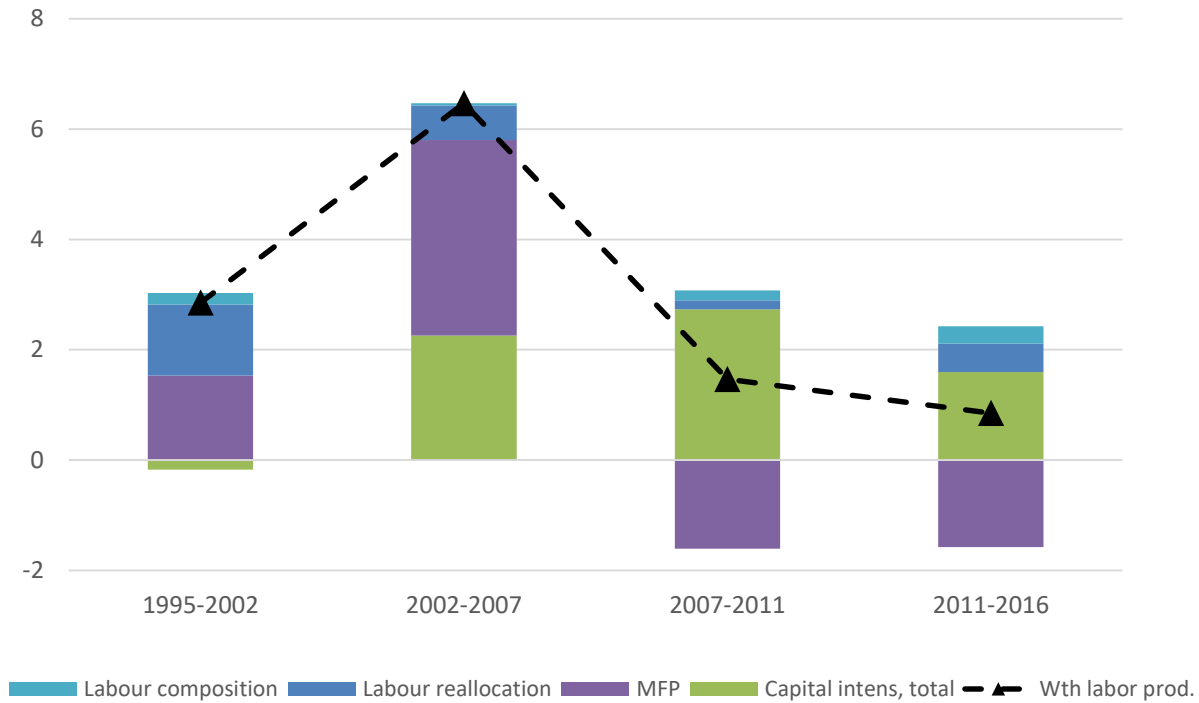
Источник: Russia KLEMS 2019



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Stagnation of the last decade = TFP slowdown

Components of labour productivity growth (p.p.)

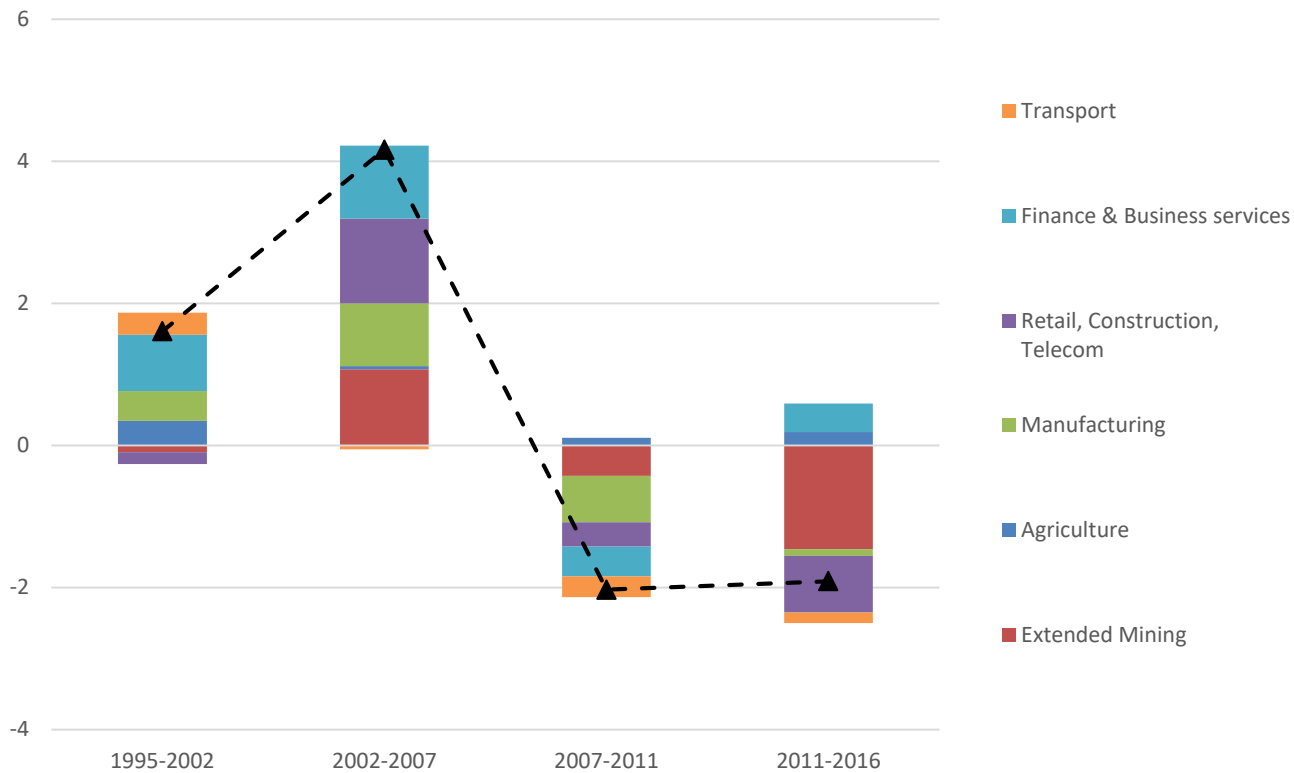


Source: Russia KLEMS 2019



Sectoral contributions to aggregate TFP growth

Aggregate TFP growth of the Russian economy and sectoral contributions (p.p.)



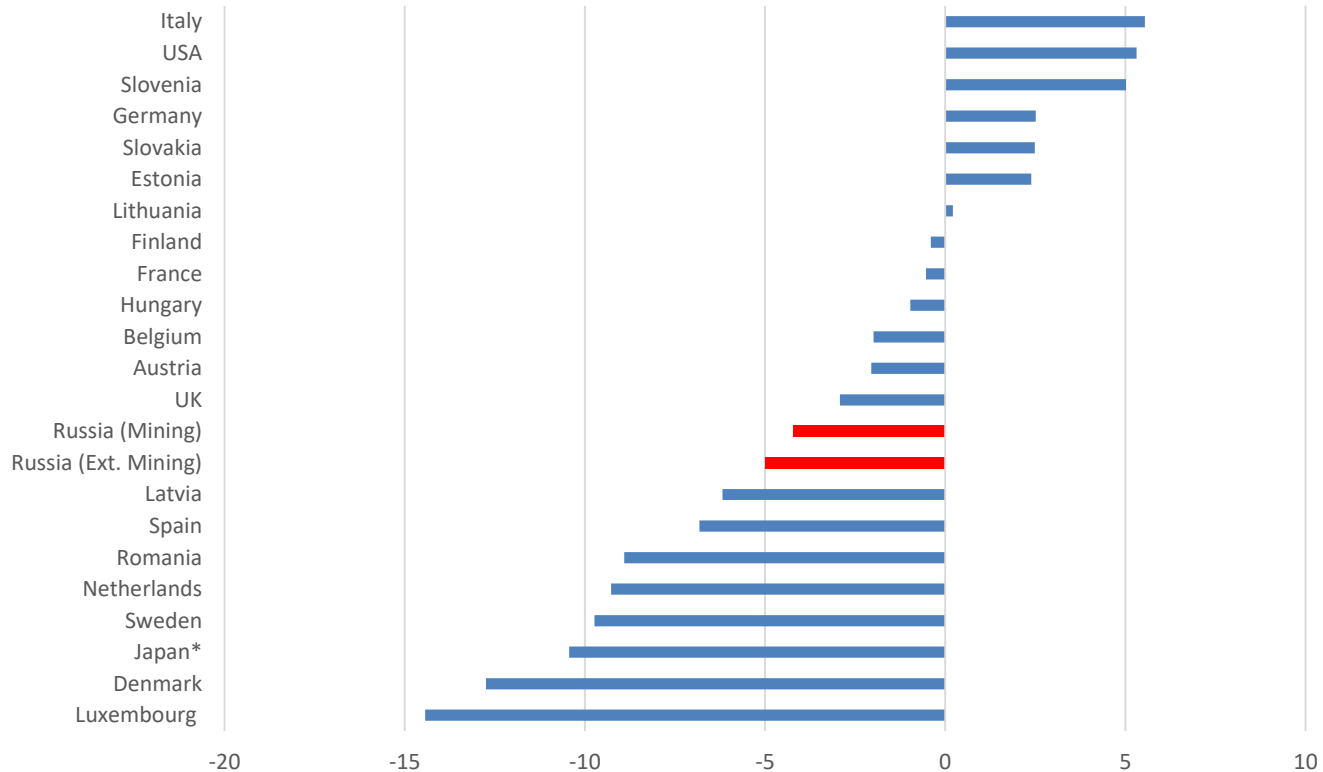
Источник: Russia KLEMS 2019



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TFP growth in mining in the comparative perspective

TFP growth in Mining in OECD economies and Russia in 2011-2016, growth rates



Sources: EU KLEMS 2019, Russia KLEMS 2019

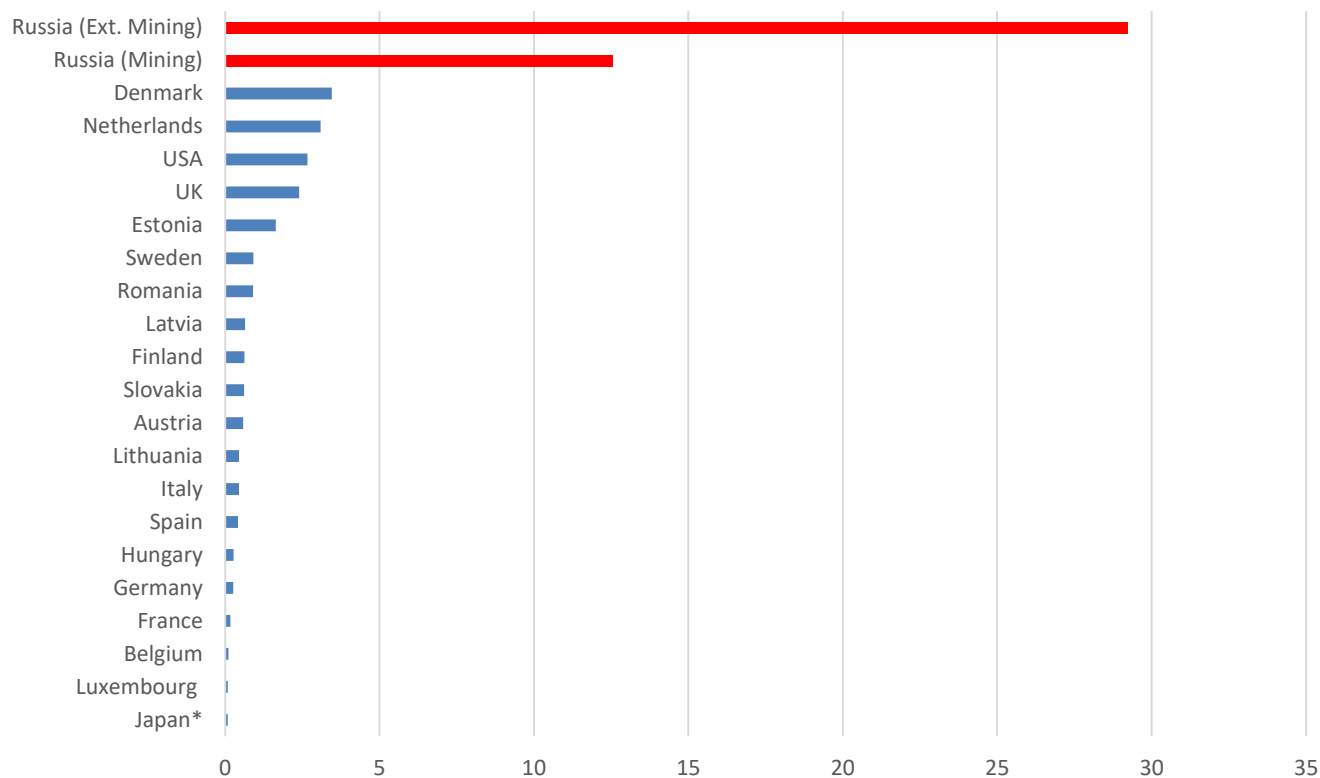
Comment: * Japan – 2011-2015



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Russia: share of Mining is huge

Average share of value added of Mining in OECD countries and Russia in 2011-2016, %



Sources: EU KLEMS 2019, Russia KLEMS 2019

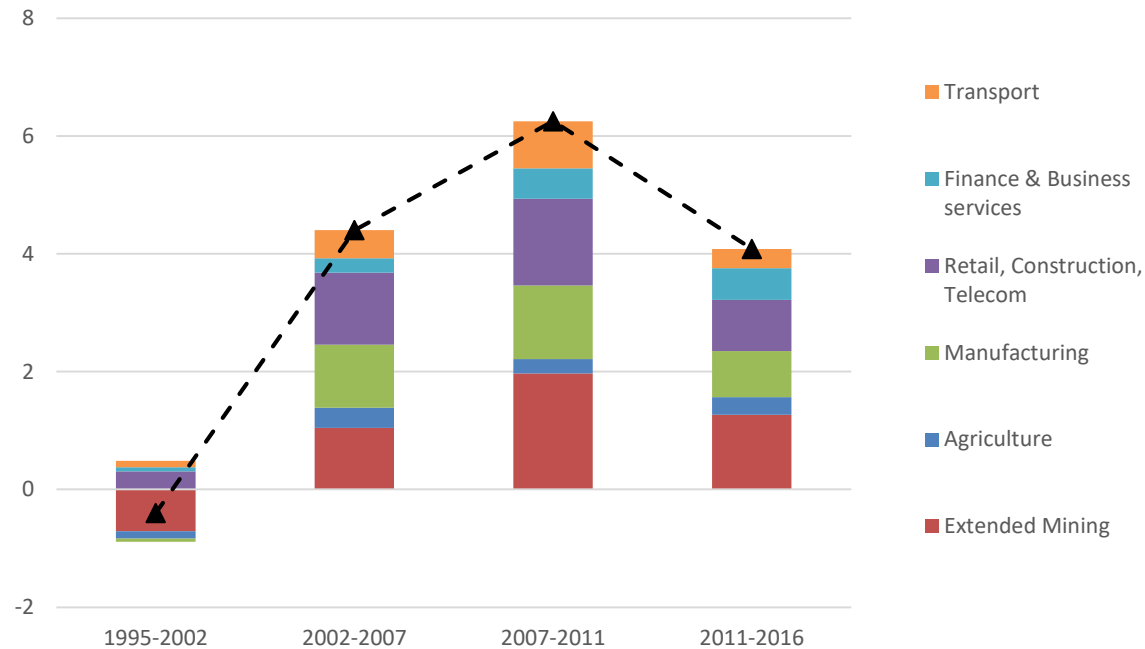
Comment: * Japan – 2011-2015



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Sectoral contributions of capital intensity

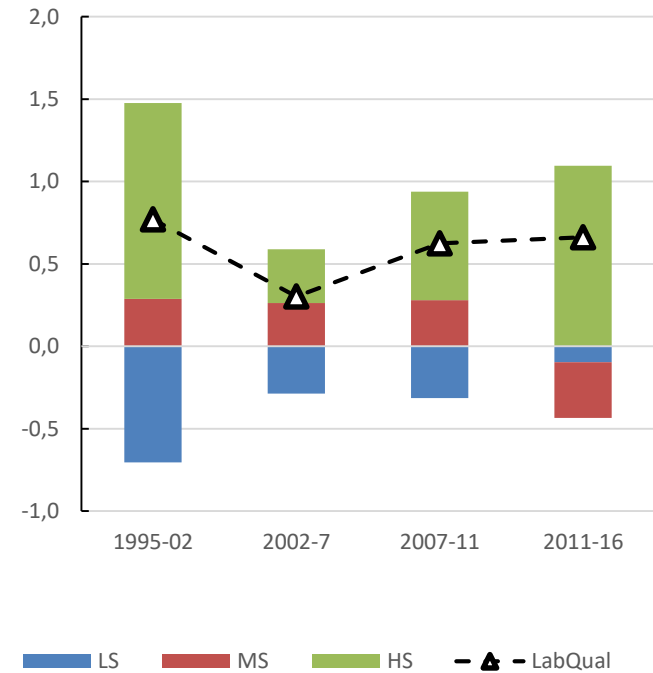
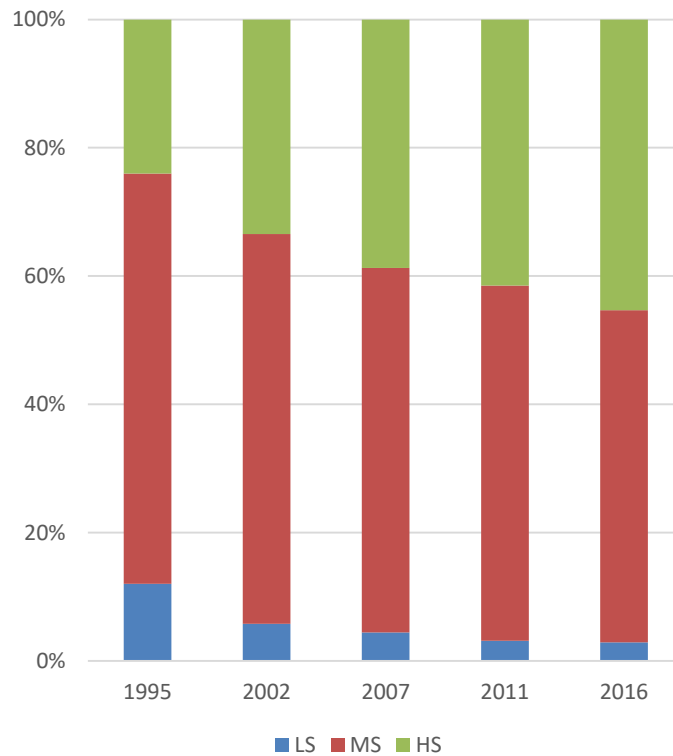
Capital Intensity growth of the Russian economy and contributions of types of assets, p.p.



Source: Russia KLEMS 2019



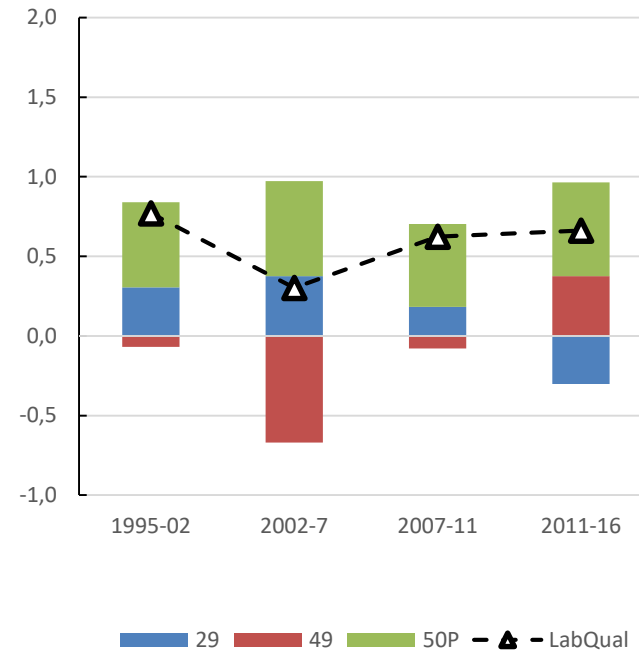
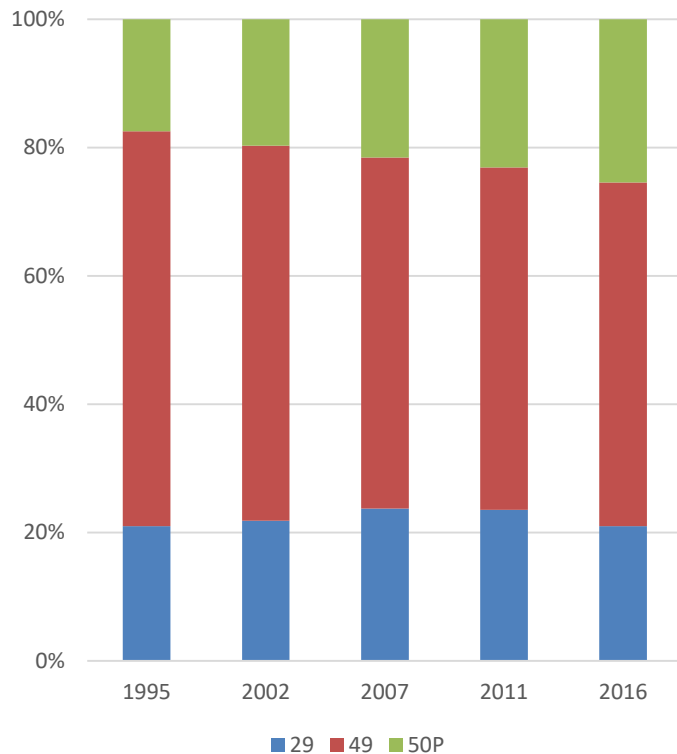
Labor Composition: Education



Source: Russia KLEMS 2019



Labour Composition: Age Structure



Source: Russia KLEMS 2019



Russia: structural change in shares of labour

Shares of hours worked (%)

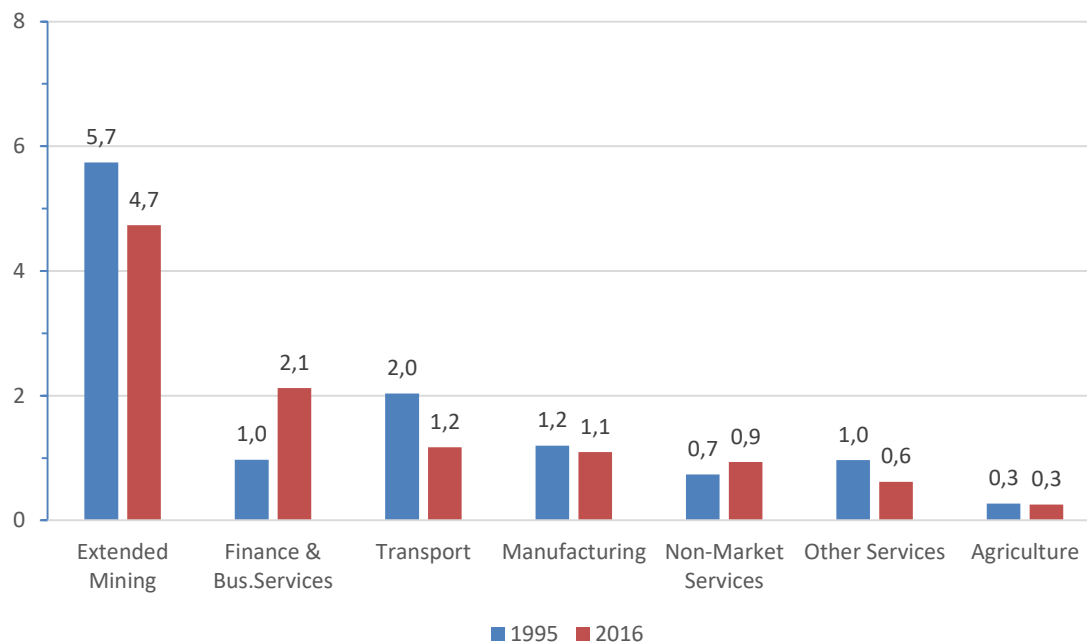
	1995	2002	2007	2011	2016
Total economy	100,0	100,0	100,0	100,0	100,0
Market economy	80,9	79,5	79,7	79,5	79,5
Agriculture	27,9	24,2	21,8	21,4	20,0
Extended Mining	3,5	4,5	4,8	4,5	4,7
Manufacturing	18,8	17,1	16,2	15,2	14,4
Other services (incl. retail, construction and telecom)	19,7	23,6	26,2	27,1	28,3
Finance and Business Services	5,2	4,7	5,1	5,6	6,1
Transport	5,7	5,4	5,7	5,7	6,0
Non-market services	19,1	20,5	20,3	20,5	20,5

Source: Russia KLEMS 2019



Russia: variation in labour productivity levels

Productivity levels in sectors of the Russian economy in **1995** and **2016**,
Total economy = 1



Source: Russia KLEMS 2019



Where do we expect growth for Russia after 2020?

Proximate Source	1999-2007	2011-2020	After 2020 - ?
Capital intensity growth as the response to the positive demand of global markets	Extended Mining, Retail	Extended Mining	Extended Mining in response to the recovery of the global economy
Technology catching up and efficiency growth	Manufacturing, Agriculture, Business services, Retail	Agriculture, Business Services	Agriculture : TFP growth is expected, but its contribution to the aggregate is negligible
Growth Enhancing Structural Change	Labour reallocation from Manufacturing and Agriculture	No	Probably, no
Labour composition	Yes	Yes	Yes , but the effect of its contribution will be limited
ICT capital and Intangibles	Yes	No	Most probably, no



Sectors and Industries (NACE 1)

- **34 industries, grouped by 7 sectors**
- **Market economy**
 - **Agriculture**
 - **Manufacturing (Nace 1: D, excl. 23)**
 - **Extended Oil and Gas (C, 51, 23)**
 - **Other Market Services (e.g. Retail, Construction, Telecom)**
 - **Finance and Business Services (J, 71-74)**
 - **Transport**
- **Non-market services (Education, Public Administration, Healthcare)**



References

Timmer, Marcel P., and Ilya B. Voskoboynikov. 2016. “Is Mining Fuelling Long-Run Growth in Russia? Industry Productivity Growth Trends in 1995-2012.” In *Growth and Stagnation in the World Economy*, edited by Dale W. Jorgenson, Kyoji Fukao, and Marcel P. Timmer, 281–318. Cambridge University Press.

<http://www.cambridge.org/ru/academic/subjects/economics/economic-development-and-growth/world-economy-growth-or-stagnation?format=HB&isbn=9781107143340#dp60CqVsDIAh7fCX.97>.

Voskoboynikov, Ilya B. 2018. “Russia since 1995: Natural Gas, Catching Up and Informality.” In *Productivity Dynamics in Emerging and Industrialized Countries*, edited by Deb Kusum Das, 313–30. Taylor & Francis India.

<https://www.routledge.com/Productivity-Dynamics-in-Emerging-and-Industrialized-Countries/Das/p/book/9781138745506>.

Voskoboynikov, Ilya B. 2017. “Sources of Long Run Economic Growth in Russia before and after the Global Financial Crisis.” *Russian Journal of Economics* 3 (4): 348–65. <https://doi.org/10.1016/j.ruje.2017.12.003>.

———. 2020. “Structural Change, Expanding Informality and Labor Productivity Growth in Russia.” *Review of Income and Wealth* 66 (2). <https://doi.org/10.1111/roiw.12417>.

Vries, Gaaitzen J. de, Abdul A. Erumban, Marcel P. Timmer, Ilya B. Voskoboynikov, and Harry X. Wu. 2012. “Deconstructing the BRICs: Structural Transformation and Aggregate Productivity Growth.” *Journal of Comparative Economics* 40 (2): 211–27. <https://doi.org/10.1016/j.jce.2012.02.004>.



Thank you!